#### **REMARKS**

# I. Claim Rejections 35 U.S.C. § 102 or 35 U.S.C. § 103(a)

In the Office Action dated November 15, 2007, the Examiner rejected claims 1, 6-7, 10 and 15-16 under 35 U.S.C. 102(b) as being anticipated by Costello et al. (USP 5,964,719) (hereinafter Costello).

Regarding claims 1 and 10, the Examiner argued that Costello discloses a method and system comprising: a) accessing an electronic portal that collects and provides ergonomic tool data to a user of said portal (Examiner cited Col. 4, lines 35-40), and b) compiling ergonomic data based on physical input provided by user to said electronic portal in order to generate ergonomic tool data to user based on physical input (Examiner cited Col. 2, lines 7-65). The Examiner claims Costello "analyzes data and provides feedback, meaning generating data" and that "Costello shows purpose to better testing dealing with ergonomics of a workpieces' design".

The Applicant respectfully requests the Examiner review the Amendments to claims 1 and 10. First, the Applicant respectfully disagrees with the Examiner's arguments. Costello fails to disclose an electronic portal that collects and provides ergonomic tool data as in claims 1 and 10. Rather, Costello discloses an <u>interface</u> for calibration and data acquisition. The present invention however, generates tool data. The innovative feature in Costello is the interface whereas in the present invention the innovative feature is the generation of tool data. Evidence of this is suggested at Col. 1 lines 43-44 it the background section of Costello, suggesting there are a variety of similar biofeedback devices available.

Costello further fails to teach association with a search engine which allows for comparison of data per the amendments to claims 1 and 10. A search engine allows for dynamic comparisons not anticipated by Costello as described by paragraph 0029 of the specification excerpted as follows:

A search engine associated with the Web portal automatically searches for corresponding matches, as indicated at block 106. Such matches are generally based on the analyzed data provided originally by the user or customer. The search

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engine generally Interprets the ergonomic analysis information submitted by the user and analyzed via the aforementioned analysis module. Upon submission of search criteria, the search engine searches for all tools that would potentially match the search parameters generated by the analysis module. The search engine can then return matches in a cascading style sheet page format, allowing the searcher or user to view both static and dynamic representations of the tools at issue, as well as information regarding supplier(s) and/or web links to the web pages associated with such suppliers.

The Applicant respectfully asserts claims 1 and 10 as amended now place this application in condition for allowance.

The Examiner has offered no discussion regarding claims 4-5 and 13-14. Thus, the Examiner believes these claims have been accepted in their present form.

Regarding claims 6 and 15 the Examiner argued that Costello discloses generating specific ergonomic data in response to compiling ergonomic data based on physical input provided by user to electronic portal in order to generate ergonomic tool data to the user based on physical input as in Claims 4 and 13 and further discloses analyzing and comparing said specific ergonomic data to data maintained within a database to thereby provide particular tool data matching said specific ergonomic to data associated with said user (Examiner cited Col. 4, lines 27-40). The Examiner further argued Costello discloses data being stored and analyzed and analysis requires some type of comparison.

The Applicant respectfully disagrees with this assessment. The Applicant respectfully requests the Examiner review the amendments made to claims 6 and 15. The Applicant appreciates that Costello discloses data being stored and analyzed. However, the Examiner has highlighted a key distinction between Costello and claims 6 and 15 in that the analyses, and therefore types of comparison, are different in the two inventions. The "analysis" in Costello refers to stored data <u>from that invention</u> (see Col. 4 lines 35-40), whereas the comparison described in claims 6 and 15 may refer

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to any data helpful in generating a "profile of motion" as described by paragraph 0036 of the specification excepted below:

The analysis module can then utilize this information in association with a generating module to generate a profile of motion that is helpful in summarizing the amount of user activity encountered and, after cross-referencing this information with a known user physical profile (e.g., user-specific factors such as age, height weight, known medical history, problem areas of concern), potential user ergonomic risk areas can highlighted in a color pattern, such as, for example, a red/yellow/green code sequence or a variation thereof. Such a generating module can form a module separate from the analysis module or can be implemented as a subroutine incorporated into the analysis module, depending upon desired embodiments.

In addition, Costello falls to anticipate the new limitations of claims 6 and 15. The Applicant\_respectfully asserts claims 6 and 15, as amended, now place this application in condition for allowance.

With regard to claims 7 and 16, the Examiner argued that Costello discloses a method and system as in claim 1 above and further discloses generating a plurality of risk factors for said user based on an analysis of ergonomic data compiled based on physical input provided by said user to said electronic portal in order to generate ergonomic tool data to said user based on said physical input (Examiner cited to Col. 2, lines 24-65). The Examiner further argued Costello discloses an analysis of harmful patterns, "which include analysis of person body with an object (citing col. 3, lines 1-10)". Therefore the more harmful the pattern of stress the more susceptible one is to injury, thus producing possible risk factors.

The Applicant respectfully disagrees with this assessment. The Applicant respectfully requests the Examiner review the amendments to claims 7 and 16. The Applicant agrees Costello discusses harmful patterns. However, the Costello reference absolutely lacks any reference, discussion, or mention of risk factors, in any capacity. This is illustrated by the specific language of Costello describing the display of real time musculoskeletal activities versus the specific language in claims 7 and 16 which describes generating specific risk factors after analysis. Production of specific risk factors is not the same as production of real time data.

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In addition, the amendments to claims 7 and 16 regarding cross referencing using specific physical characteristics of the user, as described in the specification at paragraph 0036, is not taught by the Costello reference. Thus, the Applicant respectfully asserts claims 7 and 16, as amended, now places this application in condition for allowance.

The Examiner rejected Claims 2, 3, 8, 9, 11, 12, and 18-20 under 35 U.S.C. §103(a) as being unpatentable over Costello et al. (USP 5,964,719) (hereinafter referred to as "Costello") in view of Walker et al. (USP 6,452,584 B1) (hereinafter referred to as "Walker").

Regarding claims 2 and 11, the Examiner argued that Costello discloses a method and system as in claims 1 and 10 above but admitted that Costello does not explicitly disclose; a) generating a three dimensional interactive graphic for display on a display screen for said user; b) prompting said user to interact with said three dimensional interactive graphic utilizing a user input device; and c) collecting ergonomic data from said user based on input provided by user through said user input device in association with said three dimensional graphic displayed on said display screen for said user. However, Examiner argued that Walker discloses a system for data management based on hand gestures and further discloses the three dimensional interactive graphic display (Examiner cited to Walker Col. 1, lines 55-60, Col. 2, lines 21-39 and Col. 3, lines 4-17). Therefore, Examiner argued that is would have been obvious to one having ordinary skills in the time of the art to add the interactive three-dimensional graphic to Costello. The Examiner stated that one would have been motivated to add the interactive graphic because it adds clarity to instructions, they can be relayed verbally or visually. The Examiner further argued Walker discloses other potential manipulations of the system suggesting the combination is not nonsensical and plausible.

The Applicant respectfully disagrees with this assessment. The Applicant respectfully requests the Examiner review the Amendments to claims 2 and 11. Following the holding in KSR Int'l v. Teleflex Inc., a patent composed of several elements is not proved obvious merely by

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demonstrating that each element was independently known in the prior art, it is also important to identify a reason that would have prompted such a combination and this analysis should be explicit. The Examiner has simply offered a personal opinion that such a combination is obvious because it adds clarity to instruction since it can be visually relayed, without any reference to any specific language in either of the cited references.

Further, the Examiner's prior arguments for the Walker reference teaching a three dimensional display were premised on a three dimensional display, where two dimensions are spatial and one is temporal. The Applicant refers the Examiner to the Amendments to claims 2 and 11 which specify all three dimension are spatial and none are temporal. The Walker reference does not teach or suggest a three dimensional display in which all three dimensions are spatial. Thus, the Applicant respectfully asserts claims 2 and 11, as amended, now place this application in condition for allowance.

Regarding claims 3 and 12, Examiner argued that Costello and Walker disclose a method and system as in claim 2 and 11 and Costello further discloses a user input device that comprises a motion detector configured with a plurality of pressure and weight sensors (Examiner cited to Costello Col. 2, lines 50-59, Col. 3, line 44 to Col. 4, line 14). The Examiner further argued, pressure is force divided by area and weight is the measurement of force on an object, and Costello discloses force sensors.

The Applicant respectfully disagrees with this assessment. The applicant believes the Examiner has misinterpreted the Applicants prior arguments. The Applicant is not asserting that no force measuring sensors are disclosed in the Costello reference. Rather, the Applicant is asserting the motion detector described in claims 3 and 12 is not disclosed in the Costello reference at all. The "motion sensor" is included in the claims along with sensors to measure pressure and weight specifically because it serves an independent innovative purpose in the invention. Thus, it is of crucial importance in differentiating Costello from the present invention that the limitations of Costello fail to teach or suggests the use of motion sensors in combination with pressure and weight sensors. The Applicant has amended

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claims 3 and 12 to make this distinction more obvious. The Applicant therefore asserts claims 3 and 12, as amended, now place this application in condition for allowance.

Regarding claims 8 and 18, Examiner argued that Costello discloses generating a plurality of risk factors for said user based on an analysis of ergonomic data compiled based on physical input provided by said user to said electronic portal in order to generate ergonomic tool data to said user based on said physical input as in claims 7 and 16 above and further discloses: a) a high risk factor, wherein ergonomic injury is likely to said user (Examiner cited Costello Col. 2, lines 60-67 and Col. 4, lines 14-40).; b) a medium risk factor, wherein on a short term basis, a substantial risk to said user is unlikely to occur (Examiner cited Costello Col. 2, lines 60-67 and Col. 4, lines 14-40); c) and a limited risk factor, wherein said user faces a highly unlikely risk of injury (Examiner cited Costello Col. 2, lines 60-67 and Col. 4, lines 14-40).

However, the Examiner admitted that Costello does not disclose  $\dot{q}$ ) the plurality of risk factors being graphically represented for user on a display screen as a graphical representation on a display screen of the human body. The Examiner argued that Walker discloses a graphical representation on a display screen of the human body. Therefore, Examiner stated that it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the graphical display with the risk factors of Costello. The Examiner further argued one would have been motivated to add the graphical display to provide a visual display in addition to numerical and graph displays to show the user multiple aspects of the ergonomic data. The Examiner further argued Costello "discloses harmful patters and repeated stress and the more significant the harmful patterns makes a correlation to higher chance of injury which leads to higher risk (citing col.4, lines 35-40)".

The Applicant respectfully disagrees with this assessment. The Examiner's argument that "higher stress means higher risk" is simply not a factor taught or suggested by Costello. Rather, it is a step taken by the Examiner with no textual support of any kind. The Applicant reminds the

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Examiner that the language of the references may not be taken out of context and combined then without motivation, in effect producing the words of the claims (and sometimes, not even the words or concepts of the claims), without their meaning or context. The risk factors claimed in claims 8 and 18 are specific and limited describing exact levels of risk, whereas the Costello discussion is vague and general without any specific description of the output regarding risk. In addition, the Costello reference Itself shows use of the risk factors described in claims 8 and 18 would not improve the invention. This is because the Costello invention operates in real time. What use would risk classification have when the output is constantly changing?

Finally, the Applicant asserts the amendments to claims 7 and 17, upon which claims 8 and 18 are respectively dependent render claims 8 and 18 in condition for allowance.

Regarding claims 9 and 19, the amendments to claims 9 and 19 describe the electronic portals described in claims 1 and 10 as "web portals" as described in the specification at paragraph 0023:

A user can utilize the Web to access an online portal that links users to other individuals or organizations involved in the tool industry. For example, such a portal or Web site can link manufacturing tool providers and their customers. Such a portal can provide a downloadable application that permits manufacturing tool customers to complete an ergonomic analysis of a desired manufacturing tool. The customer or user can submit, via the Web portal, requirements for a particular tool or group of tools and also conduct a search of manufacturers that either have available designs or who desire to bid on development of the tool or group of tools desired by the customer or user. Such a search can be conducted utilizing a search engine that is associated and/or integrated with the Web portal. Note that as utilized herein, the term "search engine" generally refers a type of program, routine and/or subroutine that searches documents for specified keywords and returns a list of the documents or Web pages where the keywords were found.

The Applicant submits claims 9 and 19 as amended are not taught or suggested by the Walker or Costello references and are therefore now in condition for allowance.

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Regarding claim 20, the Examiner argued the term "electronic portal' is not specifically described and therefore open to broad interpretation which Costello covers because it is an electronic device and allows access to data or information with a display. The Examiner further argued the claim language merely recites that a portal "can be" displayed, not that It has to be displayed.

The Applicant respectfully directs the Examiner's attention to paragraphs 0010, 0011, 0022, and 0024 of the specification all of which offer explicit definitions of a "portal" as described in the present invention.

In addition, as argued above in favor of claim 16, there is a significant difference between displaying real-time musculoskeletal activities and identifying potentially harmful patterns of repetitive stress, as taught by Costello, and generating a specific risk factor based on analysis of data. Costello simply identifies and displays data but does not use that data, as conceived in the present invention, to generate a plurality of risk factors.

Finally, the Applicant asserts the amendments to claim 20 are congruent with amendments made to the prior claims and that arguments made in favor of those claims further apply to claim 20. In the interest of brevity these arguments will not be repeated.

The Applicant has addressed the later of the Examiner's argument by amending the claims to require that the portal "is" rather than "can be" displayed. The Applicant therefore submits claim 20, as amended, is not taught or suggested by the Walker or Costello references and is therefore now in condition for allowance.

# II. Conclusion

In view of the foregoing discussion, the Applicant has responded to each and every rejection of the Official Action. The Applicant has clarified the structural distinctions of the present invention via such amendments. Applicant respectfully requests the withdrawal of the rejections based on the

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preceding remarks. Reconsideration and allowance of Applicant's application is also respectfully solicited.

Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact the undersigned representative to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

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